

ABSTRACT OF THE DISCLOSURE

The present invention provides a method for reducing plasma damage to a gate oxide of a metal-oxide semiconductor (MOS) transistor positioned on a substrate of a MOS semiconductor wafer. The method begins with the formation of a dielectric layer covering the MOS transistor on the substrate. An etching process is then performed to form a first contact hole through the dielectric layer to a gate on the surface of the MOS transistor, as well as to form a second contact hole through the dielectric layer to an n-well in the substrate. A bypass circuit, positioned on the dielectric layer and the first and second contact holes, and a fusion area are then formed. The fusion area, electrically connecting with the bypass circuit, also electrically connects with the MOS transistor and the n-well thereafter. Ions produced during the process are thus transferred to the n-well via the conductive wire so as to reduce plasma damage to the gate oxide. The fusion area is finally disconnected after the formation of the MOS transistor.

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